

IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF OKLAHOMA

SUNDANCE ENERGY OKLAHOMA,
LLC, d/b/a SEO, LLC,

Plaintiff,

v.

Case No. CIV-13-991-R

DAN D DRILLING CORPORATION,

Defendant.

EXPERT REPORT OF LESA S. ADAIR, P.E.



MUSE
STENCIL

A handwritten signature in dark ink, appearing to read 'Lesa S. Adair'. The signature is written in a cursive, flowing style and is positioned above a horizontal line.

Lesa S. Adair

September 2, 2014

INTRODUCTION

1. My name is Lesa S. Adair and I am the Chief Executive Officer of Muse, Stancil & Co. ("Muse") headquartered in Dallas, Texas. I have been retained by the attorneys for Sundance Energy Oklahoma, LLC, d/b/a SEO, LLC ("SEO") to assess the damages suffered by SEO as the result of having to plug and abandon the Rother 16-4-11-1HW Well (the "Rother #1") located in Logan County, Oklahoma, and drill the Rother 16-4-11 #2HW (the "Rother Replacement Well"), also located in Logan County, Oklahoma, as a replacement well for the Rother #1. SEO contends that costs incurred in the drilling, plugging and abandonment of the Rother #1 in 2012 and, in part, the drilling and completion of the Rother Replacement Well in 2013 constitute the damages arising out of the negligent and/or grossly negligent actions and omissions of Dan D Drilling Corporation ("Dan D") which served as the drilling contractor for the Rother #1.
2. My expertise is in the technical aspects of crude oil, natural gas, and NGL production, gathering, processing, storage, and marketing as well as oil and gas operations supervision, business management, profitability, transactions, transactional due diligence, marketing practices, asset valuation, contract valuation and determination of damages. I am a licensed professional engineer in Oklahoma and Texas and have been recognized as an expert witness on oil and gas issues by a variety of state and federal courts, in arbitration proceedings, before regulatory agencies, and legislative bodies. A copy of my curriculum is attached as Appendix A to this report. Muse is being compensated at a rate of \$380 per hour for my work in this matter.
3. Attached hereto as Appendix B are copies of all documents; including computations, schedules, or tabulations of data generated by me, or by others at my direction to date which support my expert testimony in this case.
4. To date, I have reviewed documents and information provided to me by counsel in conjunction with the captioned matter. A list of documents reviewed is provided in

Appendix C of this report. I understand that discovery continues in this matter and as such, I may revise my analyses, conclusions, and opinions as additional information becomes available up to the time of trial. In addition, I may offer testimony at trial regarding the testimony given by other witnesses, including the testimony of other experts.

5. As a result of analyses based on those items described in Paragraphs 3 and 4 above, as well as my training and experience, I have formed the following opinions with respect to the damages incurred by SEO as a result of the incident that occurred on the Rother #1 well site in December 2012:

- a. SEO incurred costs totaling \$1,470,935.15¹ for Rother #1 development and drilling costs prior to the incident, and response, drilling, and plugging/abandonment costs after the incident.
- b. SEO incurred costs totaling \$6,254,804.76² to develop, drill and complete the Rother Replacement Well.
- c. A total of \$49,774.72 of the costs attributable to the Rother #1 were associated with items that were beneficial to the operation of the Rother Salt Water Disposal Well (SWD) and to the development of the Rother Replacement Well that are located nearby.³
- d. SEO incurred damages as a result of the incident and the loss of the Rother #1 totaling \$1,681,230.66 before interest.⁴

¹ See Rother 1 and 2 afe comp rpts.pdf.

² Ibid.

³ See Damages Total.xlsx Sheet Rother 1 expense.

⁴ See Damages Total.xlsx Sheet Damages Summary.

- e. Estimated pre-judgment interest at 6 percent⁵ due SEO, if awarded, increases total damages due SEO by an estimated \$106,760.02.⁶

BACKGROUND

6. In 2012, SEO was the designated operator of certain producing wells located in Logan County, Oklahoma. During the spring and summer of 2012, SEO entered into contracts with Dan D to drill a series of oil and gas wells in Logan County, although no written contract was ever executed by SEO for drilling the Rother #1.
7. Nonetheless, Dan D served as the drilling contractor for the Rother #1 which was spud on December 2, 2012. Drilling continued at the well site without significant incident until December 9, 2012.⁷ During the evening of December 9, the Dan D crew on the rig attempted to free drill pipe stuck in the well at a depth of approximately 3,700 feet.⁸ During such efforts, an incident occurred on the drill floor resulting in the death of a Dan D employee and shutdown of operations at the well site.⁹
8. On December 10, all operations at the site remained shut down as Occupational Safety and Health Administration ("OSHA") representatives arrived at the site to complete the accident investigation.¹⁰ On December 11, the Dan D crew began work to recover the failed drill line in the derrick under the direction of OSHA.¹¹ Equipment recovery

⁵ 23 OS 6: Any person who is entitled to recover damages certain, or capable of being made certain by calculation, and the right to recover which is vested in him upon a particular day, is entitled also to recover interest thereon from that day, except during such time as the debtor is prevented by law, or by the act of the creditor from paying the debt. 15 OS 266: The legal rate of interest shall be six percent (6%) in the absence of any contract as to the rate of interest, and by contract parties may agree to any rate as may be authorized by law, now in effect or hereinafter enacted.

⁶ Ibid.

⁷ See Morning Reports for Dan D Rig No. 18, December 1, 2012 to December 9, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

⁸ See Morning Report for Dan D Rig No. 18, December 10, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

⁹ See Morning Report for Dan D Rig No. 18, December 10, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁰ See Morning Report for Dan D Rig No. 18, December 11, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹¹ See Morning Report for Dan D Rig No. 18, December 12, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

continued into the next day with weather shutting down work by noon.¹² Weather continued to hamper efforts to recover and repair the rig with all operations shut down at the site until the morning of December 17.¹³ An OSHA inspector was finally able to check rig components (crown, derrick and sub), supervise recovery and packing of the drill line, and return control of rig site to Dan D on December 18, 2012.¹⁴

9. Once the on-site OSHA inspection was complete, the Dan D crew completed additional rig maintenance.¹⁵ Despite completion of rig repairs and maintenance, drilling operations remained suspended pending authorization from OSHA for installation of new drill line and resumption of drilling operations.¹⁶ The Dan D crew received authorization from OSHA to continue drilling operations on the evening of December 20, 2012, and commenced operations to recover the stuck pipe remaining in the wellbore on December 21.¹⁷ Recovery operations continued on the Rother #1 until December 30, 2012, when operations were initiated to plug and abandon the well.¹⁸ Well plugging was completed and Dan D Rig No. 18 was released from the Rother #1 site at 4:00 pm on December 31, 2012.¹⁹

10. In order to develop the hydrocarbon reserves originally expected via the Rother #1, SEO drilled the Rother Replacement Well nearby. Drilling and completion of the Rother Replacement Well was more costly than the planned costs for the Rother #1 well in part because a larger, more modern drilling rig was employed.

¹² See Morning Report for Dan D Rig. No. 18, December 13, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹³ See Morning Report for Dan D Rig No. 18, December 14 to December 18, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁴ See Morning Report for Dan D Rig No. 18, December 19, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁵ See Morning Report for Dan D Rig No. 18, December 19 to December 21, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁶ See Morning Report for Dan D Rig No. 18, December 21, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁷ See Morning Report for Dan D Rig No. 18, December 21 and December 22, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁸ See Morning Report for Dan D Rig No. 18, December 23 to December 31, 2012 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

¹⁹ See Morning Report for Dan D Rig No. 18, January 2, 2013 (1Leo Rother 16-4-11-1HW DDR spud 2012 1202.pdf).

11. In addition to costs associated with direct well operations, SEO also incurred additional expenses attributable to the company's response to and participation in the investigation of the rig failure conducted by OSHA and preparation to defend possible claims that might be asserted with respect to the death of the Dan D employee as the result of the rig failure. I understand that the OSHA investigation findings resulted in citations to Dan D for numerous workplace safety violations.

DEVELOPMENT AND DRILLING COSTS

ROTHER #1

12. Drilling on the Rother #1 began on December 2, 2012. Capital costs in the oil and gas production industry are typically submitted for approval in a written package that is referred to as the Authorization for Expenditure or "AFE". Once approved, the description, schedule and costs projected in the AFE are relied upon as the approved budget for the project. The AFE amount for the Rother #1 was \$3,525,171.²⁰
13. Muse requested and SEO provided a summary of the costs incurred for the Rother #1 and the Rother Replacement Well. The cost information was extracted by SEO personnel from the company's cost accounting database which captures invoicing, approval and cost information in the normal course of business.
14. As is typical in cost accounting systems, each cost item is assigned or "coded" to a cost account that aggregates costs by segment for the company's business operations. The listing of such cost accounts for any particular cost accounting system is referred to as the chart of accounts. The line item detail for costs associated with the Rother #1 Well were reviewed by cost account and line item entry in order to assess the costs incurred with respect to the work completed at the Rother #1. The cost entries were also reviewed with respect to the assignment of individual items to specific cost accounts. Additional invoice detail and backup for individual line item cost entries was also provided by SEO providing for more detailed cost review.

²⁰ Page 4, See R10000467_rother 16-4-11-1HW AFE COMPARISON.

15. Review and assessment of Rother #1 cost data and information resulted in the confirmation of total SEO costs of \$1,470,935.²¹ In addition, SEO incurred costs related to the OSHA investigation of the incident at the site as well as costs associated with the potential defense against any claims filed by other third parties as a result of the incident; however, such costs were not allocated directly to the Rother #1 and are, therefore, not included in this damage assessment.

ROTHER REPLACEMENT WELL

16. Drilling of the Rother Replacement Well commenced in January 2013.²² The AFE amount for the Rother Replacement was \$4,735,614.²³ The estimated cost to drill and complete the Rother Replacement Well was approximately \$1.2 million above the estimated cost of the Rother #1. This increase in costs was partially attributable to the use of a larger, more modern drilling rig and partially to changes in the well completion design in the Rother Replacement Well relative to the Rother #1. The actual cost to drill and complete the Rother Replacement Well was \$6,254,804.76.²⁴

COMPARISON OF WELL COSTS

17. Review of the cost information for the Rother #1 and Rother Replacement Well indicated that some overlap was possible between costs incurred for the Rother #1, Rother SWD, and the Rother Replacement Well. Specifically, costs in three cost accounts appeared to include items that may have been incurred for the development of the Rother #1, but that could have also benefitted the operation of the Rother SWD and the development of the Rother Replacement Well.
18. After review of the summary cost information and supporting documents, SEO personnel were interviewed regarding costs in the three cost accounts shown below to determine which, if any, of the items included benefitted the operation of the Rother SWD and/or the Rother Replacement Well.

²¹ See Rother 1 and 2 afe comp rpts.pdf.

²² See 1Rother 16-4-11-2HM DDR spud 2013 0101.pdf.

²³ See Rother 1 and 2 afe comp rpts.pdf.

²⁴ Ibid.

- a. 8200.350 IDC Title Opinion
- b. 8200.352 IDC Spacing & Legal
- c. 8200.360 IDC Locations/Roads/Fencing

19. SEO personnel confirmed that a portion of the costs were beneficial to the development of either the Rother SWD or the Rother Replacement Well, or both wells. As such, the total costs attributable to the loss of the Rother #1 were reduced as shown in the following table.²⁵

	ROTHER 16-4-11-1 HW	After Reclassification ROTHER 16-4-11-1 HW
<i>Expenditures Partially Reclassified to Rother and SWD</i>		
8200.350 IDC Title Opinion	\$70,578.04	\$44,550.79
8200.352 IDC Spacing & Legal	\$47,494.88	\$23,747.41
8200.360 IDC Locations/Roads/Fencing	-	-
Total	\$118,072.92	\$68,298.20
Note: Category 8200.360 IDC Locations/Roads/Fencing amount of \$97,049.59 pending reclassification request to SEO		

CONCLUSIONS/OPINIONS - DAMAGES ATTRIBUTABLE TO THE LOSS OF THE ROTHER #1

20. The losses incurred by SEO attributable to the incident and loss of the Rother #1 are summarized in the table below. The value of the loss was determined by assessment of the total costs attributable to the Rother #1 less costs incurred for the Rother #1 that were subsequently determined to benefit the on-going operation of the Rother SWD and the Rother Replacement Well which are located adjacent to the site. In addition, increased costs incurred by SEO as the result of the replacement of the Dan D rig with a larger, more modern rig for the Rother Replacement Well were also included. Interest was estimated for the outstanding amounts due SEO. Damages due SEO before interest total \$1,681,230.66.²⁶ The associated damages summary including estimated interest is provided in the table shown below.

²⁵ See Damages Total.xlsx Sheet Rother 1 expense.

²⁶ See Damages Total.xlsx Sheet Damages Summary.

SEO Summary of Damages and Interest			
	Damages U.S. Dollars	Interest Through 9/2/2014 U.S. Dollars	Damages plus Interest U.S. Dollars
Rother 16-4-11-1 Expenses	\$ 1,421,160.43	\$ 85,100.92	\$1,506,261.35
Differential Mobilization Rother 16-4-11-2	\$ 74,836.90	\$ 6,749.15	\$ 81,586.05
Increased Day Rate Rother 16-4-11-2	\$ 185,233.33	\$ 14,909.95	\$ 200,143.29
Total	\$ 1,681,230.66	\$ 106,760.02	\$1,787,990.68
Note: Interest calculated at 6% simple interest rate			

CERTIFICATION

21. We certify that, to the best of our knowledge and belief:

- a. The statements of fact contained in this report are true and correct.
- b. The reported analyses, opinions, and conclusions are limited by the reported assumptions and limiting conditions and represents our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- c. We have no present or prospective interest in the property or business that is the subject of this report and no personal interest with respect to the parties involved.
- d. We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- e. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- f. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that

favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this analysis.